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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/505,446	02/16/2000	Scott R. Johnson	15886-405	5403

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HICKMAN PALERMO TRUONG & BECKER, LLP
1600 WILLOW STREET
SAN JOSE, CA 95125

EXAMINER
AUVE, GLENN ALLEN

ART UNIT	PAPER NUMBER
2181	

DATE MAILED: 09/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/505,446	JOHNSON ET AL.	
	Examiner	Art Unit	
	Glenn A. Auve	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *18-22* is/are allowed.

6)☒ Claim(s) *1,2,6-17,23-26 and 30-41* is/are rejected.

7)☒ Claim(s) *3-5 and 27-29* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 36-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 36 is rejected based on lack of positive antecedent basis of "the second predetermined power level" on lines 10-11.

Claims 37-40 are rejected because the depend on claim 36.

Claim 37 is also rejected based on lack of positive antecedent basis of "the second predetermined voltage" on lines 2-3.

Claim 38 is also rejected based on lack of positive antecedent basis of "the second predetermined voltage" on lines 2-3.

In claim 38, line 2 "then" should be "than".

Claim 39 is also rejected based on lack of positive antecedent basis of "the second predetermined voltage" on line 1; and "the first predetermined voltage" on line 2.

Claim 40 is also rejected based on lack of positive antecedent basis of "the second predetermined voltage" on line 1.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1,2,6-17,23-26, and 30-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Wisor et al., U.S. Pat. No. 5,442,794.

As per claim 1, Wisor et al. (Wisor) shows receiving an input signal to turn on the computer; determining whether the computer is in the sleep mode; accessing the device for detecting the battery power level if in the sleep mode; comparing the detected battery power to a predetermined level; and maintaining the computer in the sleep mode if the battery level is less than the predetermined level (at least in col.5, lines 56-68). Wisor shows all of the steps recited in claim 1.

As for claim 2, the argument for claim 1 applies. Wisor also shows that accessing the device for detecting a battery power level is carried out by an analog to digital converter (inherent, in that the analog voltage value must be converted to a digital value in order to determine whether the voltage has reached the threshold). Wisor shows all of the steps recited in claim 2.

As for claim 6, the argument for claim 1 applies. Wisor also shows that maintaining the sleep mode comprises receiving an input signal for turning on power in the computer; responding to the signal by determining if the computer is in the sleep mode; and responsive to the determination, masking interrupt signals for powering one or more applications and devices of the computer (cols. 5-6). Wisor shows all of the steps recited in claim 6.

As for claim 7, the argument for claim 6 applies. Wisor also shows that the masking includes masking interrupt signals for powering one or more devices or applications which provide a feedback to the user that the computer is operational (cols. 5-6). Wisor shows all of the steps recited in claim 7.

As for claim 8, the argument for claim 7 applies. Wisor also shows that the masking includes masking interrupt signals for powering the display (inherent in that the computer is stopped from powering up). Wisor shows all of the steps recited in claim 8.

As for claim 9, the argument for claim 7 applies. Wisor also shows that the masking includes masking interrupt signals for powering a communication device (inherent in that the computer is stopped from powering up). Wisor shows all of the steps recited in claim 9.

As per claims 10 and 34, Wisor shows monitoring the battery power level at predetermined periodic intervals; responsive to the battery level detection, comparing the battery power level to a first predetermined level; and responsive to determining that the battery power is less than the predetermined level, setting the sleep mode of the computer (throughout cols. 3-6). Wisor shows all of the steps recited in claims 10 and 34.

As for claims 11 and 35, the argument for claims 10 and 34 applies. Wisor also shows that accessing the device for detecting a battery power level is carried out by an analog to digital converter (inherent, in that the analog voltage value must be converted to a digital value in order to determine whether the voltage has reached the threshold). Wisor shows all of the steps recited in claims 11 and 35.

As for claim 12, the argument for claim 10 applies. Wisor also shows providing a transient warning message to the user indicating the sleep mode is being set (abstract and cols. 3-6). Wisor shows all of the steps recited in claim 12.

As for claim 13, the argument for claim 12 applies. Wisor also shows that the warning message is an audible message in the form of an alarm (abstract). Wisor shows all of the steps recited in claim 13.

As for claim 14, the argument for claim 10 applies. Wisor also shows that setting the sleep mode comprises switching the computer to a low energy consuming shutdown state and

masking interrupt signals for powering one or more applications or devices (cols. 3-6). Wisor shows all of the steps recited in claim 14.

As for claim 15, the argument for claim 14 applies. Wisor also shows that the masking includes masking interrupt signals for powering one or more devices or applications which provide a feedback to the user that the computer is operational (cols. 5-6). Wisor shows all of the steps recited in claim 15.

As for claim 16, the argument for claim 15 applies. Wisor also shows that the masking includes masking interrupt signals for powering the display (inherent in that the computer is stopped from powering up). Wisor shows all of the steps recited in claim 16.

As for claim 17, the argument for claim 15 applies. Wisor also shows that the masking includes masking interrupt signals for powering a communication device (inherent in that the computer is stopped from powering up). Wisor shows all of the steps recited in claim 17.

As per claim 23, Wisor shows responsive to receiving an input signal to turn on the computer, means for accessing the sleep mode setting; responsive to determining that the computer is in the sleep mode, means for accessing the device for detecting the battery power level if in the sleep mode; and responsive to the detected battery power level, means for maintaining or exiting the sleep mode (at least in col.5, lines 56-68). Wisor shows all of the steps recited in claim 23.

As for claim 24, the argument for claim 23 applies. Wisor also shows that the device for detecting a battery power includes an analog to digital converter (inherent, in that the analog voltage value must be converted to a digital value in order to determine whether the voltage has reached the threshold). Wisor shows all of the steps recited in claim 24.

As for claim 25, the argument for claim 23 applies. Wisor also shows a processor coupled to an interrupt controller and a memory controller, the interrupt controller coupled to the

memory controller, the memory including sleep mode software and a residual energy manager module (cols. 3-6). Wisor shows all of the steps recited in claim 25.

As for claim 26, the argument for claim 25 applies. Wisor also shows responsive to the detected battery level, means for comparing the battery power level with a predetermined level; and means for maintaining the computer in the sleep mode if the battery level is less than the predetermined level (at least in col.5, lines 56-68). Wisor shows all of the steps recited in claim 26.

As for claim 30, the argument for claim 26 applies. Wisor also shows that responsive to receiving an input signal for turning on power in the computer, means for determining if the computer is in the sleep mode; and responsive to the determination, means for masking interrupt signals for powering one or more applications and devices of the computer (cols. 5-6). Wisor shows all of the steps recited in claim 30.

As for claim 31, the argument for claim 30 applies. Wisor also shows that the one or more devices or applications include a device which provides a feedback to the user that the computer is operational (cols. 5-6). Wisor shows all of the steps recited in claim 31.

As for claim 32, the argument for claim 31 applies. Wisor also shows that the one or more applications and devices includes the display (inherent in that the computer is stopped from powering up). Wisor shows all of the steps recited in claim 32.

As for claim 33, the argument for claim 31 applies. Wisor also shows that the one or more applications or devices includes a communication device (inherent in that the computer is stopped from powering up). Wisor shows all of the steps recited in claim 33.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claim 41 is rejected under 35 U.S.C. 102(e) as being anticipated by Wong-Insley, U.S. Pat. No. 6,131,166.

As per claim 41, Wong-Insley shows a processor; a memory device; a battery; an input device to signal the processor to power the computer on; a battery power detector; and software residing in the memory and executed by the processor having instructions for selecting an operation of the sleep mode in the computer when the detected battery power level is lower than a first predetermined level (at least col. 13). Wong-Insley shows all of the elements recited in claim 41.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references show other power and sleep control systems for portable computers.

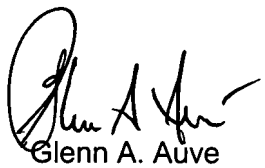
8. Claims 3-5 and 27-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: Claim 18 includes limitations directed to one voltage level for deciding whether to enter the sleep mode and another voltage necessary in order to exit the sleep mode. These limitations do not appear to be present in the prior art.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn A. Auve whose telephone number is (703) 305-9638. The examiner can normally be reached on M-F (8:00 - 5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Wong can be reached on (703) 305-3477. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Glenn A. Auve
Primary Examiner
Art Unit 2181

gaa
September 26, 2002